

REMARKS

Claims 1-42 and 45-60 are currently pending in the application, with claims 1, 17, 18, 26, 42, 45, and 53 being independent. Claims 1, 17, 18, 26, and 42 have been amended to more appropriately define the present invention. Claim 38 has been amended to address an improper antecedent basis. Applicant respectfully requests favorable consideration of this response in light of the amendments and comments contained herein, and earnestly seek timely allowance of the pending claims.

Examiner Interview

On June 2, 2006, Applicant's representatives Cathy Voisinnet and John Voisinnet conducted a personal interview with the Examiner to discuss the §112 rejection of claims 45 and 53, the §102 rejection of claim 1, and §103 rejections of claims 45 and 53, as set forth in the outstanding Office Action. During the interview, Applicants submitted that the feature "larger than any single practicable useable surface" is definite. While the Examiner did concede during the interview that he understood this feature after considering of the specification, he felt that the issue would require further consideration and consultation with a Quality Assurance Specialist (QAS). Applicants wish to thank the Examiner for the courtesy of extending a personal interview.

Claims Rejections Under 35 U.S.C. §112

The Examiner rejected claims 38 and 45-60 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to point out and distinctly claim the invention. Applicant respectfully traverses the rejection.

Regarding claims independent claims 45 and 53, the Examiner asserted that the term "practicable usable surface" is a relative term which renders the claim indefinite. The Examiner specifically asserts that the claim is not defined by the term, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Applicants respectfully disagree, and assert that one of ordinary skill in the art would be able to ascertain the metes and bounds of claims 45 and 53 when read in light of the specification. The Examiner's attention is respectfully directed to, for example, page 25, para. no. 2, which recites:

[t]he position-coding pattern is able to code a large number of absolute positions. As each position is coded by 6 x 6 dots, each of which can have one of four values, 4^{36} positions can be coded, which with the above-mentioned nominal distance between the dots corresponds to a surface of 4.6 million km^2 .

Applicant submits that the disputed term, when taken in context of the claim: "represents a physical area which is larger than any single practicable usable surface," and when read in light of specification, is definite. In other words, one of ordinary skill in the art would be reasonably apprised of the scope of the claim. Accordingly, Applicant respectfully requests the Examiner withdraw the 112 rejection of claims 45-60.

Regarding claim 38, while Applicant does not necessarily acquiesce to the Examiner's assertion that the claim is indefinite, Applicant has amended claim 38 to address the improper antecedent basis in order to advance the prosecution of the application.

Claims Rejections Under 35 U.S.C. §102

The Examiner rejected claims 1-9, 12, 18-24, 26-34, 36 and 42 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,515,491 to Bates ("Bates"). Applicant submits the Examiner has failed to establish a *prima facie* case of anticipation and respectfully traverses the rejection.

Bates merely discloses a system and method which permits management of communications within a collaborative computer based system. The collaborative system includes multiple display devices and a shared data object that is simultaneously accessible by multiple users within the system. Portions of the shared data object may be displayed on the display device and cursors are provided within the shared data object. Each of the cursors is associated with a user. (See Abstract.) Specifically, Bates discloses a "What You See Is What I

See” collaborative editor which allows for the protection of user selectable blocks of shared data objects from simultaneous manipulation originating with other users (col. 1, lines 25-32).

Bates further discloses that a user has access to a shared data object through a multi-user interface which typically includes a video monitor under the control of the user’s workstation. The interface is supported by software allowing multiple simultaneous access to an object with the right to manipulate the contents of the object (col. 2, lines 1-7). A locally generated mouse pointer 22 is available for operation control features of a window shown by the video monitor by a user utilizing a mouse. Bates further discloses that the term mouse could refer to any type of pointing device including a track ball, light pen, touch screen and the like (col. 5, lines 37-43).

Window 116 displays a shared graphical object for editing using a collaborative graphics editor. Three users, represented through cursors 130, 138 and 140 appear in the view of the shared graphical object shown in display field 117. A plurality of different sub-objects 118, 120, 122-128 appear in the view. A visual attribute of each region, or its border, indicates some associational status between the region and a user. Some regions 142, 134, and 123 are user selectable and may be locked against manipulation by other users, or may be used to merely indicate ownership (col. 6, lines 19-34; Fig. 4).

Bates further discloses data structure records utilized for the collaborative graphics editor in Fig. 17B. The current user list for a collaborative graphics editor includes a list of pointers to cursor records 164. A record 164 includes a unique identifier for the cursor. A current position record indicating the X-axis and Y-axis coordinates in the graph or picture for the cursor is maintained, subject to update with each command resulting in a change of position (col. 10, lines 59-67).

However, Bates fails to disclose, at least, “wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface,” as recited in claims 1, 17, 18, 26, and 42.

Bates is distinguished by the present invention in that the coordinates represented are purely virtual, and do not represent physical positions in unique and continuous manner.

Moreover, the virtual coordinates disclosed by Bates cannot represent a surface which is larger than any single practical useable surface.

Accordingly, Applicant respectfully requests the Examiner withdraw the rejection of claims 1, 17, 18, 26, and 42. Claims 2-16 depend from claim 1 and are allowable at least by virtue of their dependency from allowable claim 1. Claims 19-25 depend from claim 18 and are allowable at least by virtue of their dependency from allowable claim 18. Claims 27-41 depend from claim 26 and are allowable at least by virtue of their dependency from allowable claim 26.

Claims Rejections Under 35 U.S.C. §103

The Examiner rejected claims 10-11, 13-17, 25, 35, 37-41, 45-60 under 35 U.S.C. 103(a) as being unpatentable over Bates in view of U.S. Patent No. 5,852,434¹ to Sekendur ("Sekendur"). Applicant submits the Examiner has failed to establish of *prima facie* case of obviousness and respectfully traverses the rejection.

The teachings of Bates are summarized above the arguments for the allowability of claims 1, 17, 18, 28, and 42.

In the Office Action, the Examiner asserted in support of the rejection of claim 45 that Bates teaches "the two-dimensional coordinate reference represents a physical position in a unique and continuous manner, and represents a physical area which is larger than any single surface (Bates, Fig. 4)." (See Office Action: page 10, para. no. 3.) Applicants submit that Bates does not disclose the asserted teaching.

Bates merely identifies on-screen cursor position records which indicate the X-axis and Y-axis coordinates in the graph or picture associated with the cursor, which may be updated with a command resulting in a change of position (col. 10, lines 63-67). Applicant submits these coordinates do not represent unique physical positions, but are abstracted values which allow users to work together within a collaborative computer system. Moreover, these coordinates describe locations within a shared window which is fully displayed in Fig. 4. Nowhere does Bates teach that the window is larger than any single surface as asserted by the Examiner. In fact,

¹ Applicant notes the Office Action inadvertently cited Sekendur as U.S. Pat. No. 6,502,756. Applicant further notes the proper number (U.S. 5,852,434) was cited in Form PTO-892.

Bates shows screen coordinates which have a one-to-one mapping with individual memory locations in video memory, and would be limited by the size of the display screen and the size of the memory on the video card driving the display.

Sekendur merely discloses a digitizer and absolute position determination device for indicating the instantaneous position and movement of a stylus on a surface. The surface is formatted with a position related code for indicating X-Y coordinates. (See Abstract.) Sekendur discloses a stylus which is a pen which reads the position code from the surface using a light source 17 placed in the stylus (col. 6, lines 38-41; Fig. 7). Moreover, Sekendur discloses that the interface is almost identical to that of a pen/pencil and paper, and that an original hard copy is produced as part of the input by writing or drawing on the surface (col. 2, lines 19-37).

However, neither Bates or Sekendur teach or suggest, at least, “wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface,” as recited in claim 17; and “wherein the two-dimensional coordinate reference represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface,” as recited in claims 45 and 53.

Applicant notes that it appears the above feature, “larger than any single practicable surface,” did not appear to be considered in the rejection. While this feature was at issue in the 112 rejection, Applicant submits that the Examiner must accord this feature patentable weight consider it in the analysis of the rejection.

Applicants further submit that one of ordinary skill in the art would not be motivated to combine the teachings of Bates and Sekendur. Bates’s invention is an interactive collaborative editing system which allows a plurality of users to contribute content and alterations to a digital document. Bates contemplates doing this entirely in a virtual manner, as data structures are disclosed which maintain records for each current user. Records are digitally kept of cursor identifiers, cursor positions, association and lock records of regions, etc. (See col. 10, line 59-col. 11, line 14; Fig.17B.) Bates further contemplates the use of “light pen” to enter commands into the system. Sekendur discloses an interface which “almost identical” to pencil and paper, and

utilizes a pen having a light source and coded paper for determining positions which are entered into a computer. Sekendur further teaches that the paper surface has the advantages of keeping paper records.

Applicants submit that because Bates already discloses utilizing a light pen as a user interface, and because Bates teaches a virtual system which keeps records regarding users digitally, there would be no motivation to modify Bates by the teachings of Sekendur. Utilizing Sekendur's paper system would be antithetical to computer collaboration system and would increase the cost of operating the system.

Accordingly, Applicant respectfully request the Examiner to withdraw the rejection of claims 17, 45, and 53. Claims 46-52 depend from claim 45 and are allowable at least by virtue of their dependency from allowable claim 45. Claims 54-60 depend from claim 53 and are allowable at least by virtue of their dependency from allowable claim 53.

CONCLUSION

In view of the above remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael K. Mutter (Reg. No. 29,680) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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